

Appln No. 09/703,264

Amdt date August 2, 2005

Reply to Office action of November 2, 2004

REMARKS/ARGUMENTS

Claims 1-39 are pending in this application. The independent claims 1, 11, 22, 33, and 37 are amended. The specification is also amended for minor informalities.

Independent claims 11 and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Office action alleges that "a single adaptive filter" is not disclosed in the specification. Independent claims 1, 33, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eppler Jr. et al (US 5,600,714), in view of Finn (5,706,344).

The Office Action of May 11, 2005, explained that because the fundamental property of a filter is its transfer function, a single filter must have only one transfer function. The Examiner is reading the single filter of claims as multiple filters because, according to the Office Action, these filters include multiple transfer functions in parallel.

The independent claims 1, 11, 22, 33, and 37 have been amended to clarify "a single adaptive filter having a single transfer function." (Underlining added for emphasis).

Further, support for the fact that the "single adaptive filter" of the above claims is truly single, is set forth below. First, the Office Action cites page 15 lines 28-35 of the specification stating "Referring to FIG. 8 ... the adaptive filter models in parallel the transfer functions of each of the three possible echo paths" for the proposition that the claimed "single filter" is in fact several filters in parallel. This passage of the specification refers to FIG. 8 which shows three

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parallel signal paths 400, 402, and 404, each signal path having its own transfer function. However, these parallel signal paths do not lead to the adaptive filter W that is shown in FIG. 7. Rather, the inputs to these depicted parallel signal paths are combined in the combiner 301 resulting in one input signal 301(a) that forms the single input to the single transfer function of the adaptive filter W. In other words, the incoming and outgoing lines of the cited FIG. 8, i.e., $M(n)$, $V(n)$, and "Input to ADC Converter", are not inputs and outputs of the adaptive filter W in FIG. 7. The adaptive filter W has only one input 301(a) and uses only one transfer function to filter that one input.

Further, the double talk logic 308 provides a control signal input to the adaptive filter W that is only for freezing the adaptive filter coefficients. In other words, this control signal is not in any way being filtered by the adaptive filter and there is no transfer function required for this control signal in the adaptive filter W. As a result, the combination of the figures and the specification provides ample support to make the claims enabled and to satisfy the 35 U.S.C. 112 first paragraph requirements.

Accordingly, the independent claims 1, 11, 22, 33, and 37 are enabled in view of the specification and the drawings, and are patentable in view of the cited references. Consequently, withdrawal of the rejections and allowance of these claims are respectfully requested.

The remaining claims 2-10, 12-21, 23-32, 34-36, and 38-39 depend from the allowable independent claims directly or

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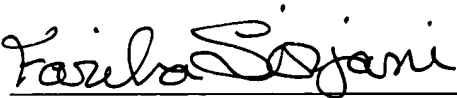
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indirectly. These dependent claims include all of the limitations of the claims from which they depend and additional limitations therein. Accordingly, these claims are allowable over the cited references for the same reasons that their independent base claims are allowable and for the additional limitations they include. Applicants respectfully request the withdrawal of the rejections and allowance of these claims.

In view of the foregoing amendments and remarks, it is respectfully submitted that this application is now in condition for allowance, and accordingly, reconsideration and allowance are respectfully requested.

Respectfully submitted,
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